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PETER VOGEL GE HEALTHCARE 3000 N. GRANDVIEW BLVD., SN-477 WAUKESHA, WI 53188			BATES, KEVIN T	
			ART UNIT	PAPER NUMBER
			2153	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/605,317

Applicant(s)

MA ET AL.

Examiner

Kevin Bates

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This Office Action is in response to a communication made on August 30, 2007.

Claims 27-31 have been cancelled.

Claims 1-26 are pending in this application.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 15, 22, and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim contains the limitation "display said image together with associated digital images indirectly produced by said imaging apparatus". It is unclear from the claim how an imaging apparatus can indirectly produce a digital image.

Claims 11 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims contain the limitation of testing the informational attributes for desirability. Desirability is a subjective standard to test and it makes the meets and bounds of the claim unclear.

Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear from the claim what it means for the additional

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servers to be interfaces through direct memory access with the other computers "as integrated." It is not clear how anything in that claim is integrated just by stating "as integrated."

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1, 2, 6, 8, 9, and 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Camara (7197158).**

**Regarding claim 1,** Camara teaches a system for introducing informational attributes suited for selective inclusion within image headers that are selectively storable in a database together with pixel data of associated images produced by an imaging apparatus (Column 2, lines 41 – 44; line 66 – Column 3, line 4), said system comprising:

an interactive workstation computer system (Column 2, lines 56 – 57, the local computer system) electrically connectable to the database (Column 3, lines 52 – 56), electrically connectable to the imaging apparatus (Column 2, lines 58 – 65; lines 44 –

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47), and comprising memory-stored software applications for operating said imaging apparatus (Column 6, lines 4 – 5);

a memory-stored updatable table of defined informational attributes suited for selective inclusion within image headers (Column 7, lines 35 – 48; Column 8, lines 15 – 21, where different DLLs contain different algorithms to create different types of metadata for images);

an interactive computer for generating software files of image header definitions from said table of defined informational attributes (Column 7, lines 35 – 48; Column 8, lines 15 – 21); and

a means to transport said software files of image header definitions to said interactive workstation computer system (Column 7, lines 39 – 48).

**Regarding claim 21**, Camara teaches a method for introducing informational attributes suited for selective inclusion within image headers that are selectively storable in a database together with pixel data of associated images produced by an imaging apparatus (Column 2, lines 41 – 44; line 66 – Column 3, line 4), said method comprising the steps of: (a) generating software files of image header definitions from a memory-stored updatable table of defined informational attributes suited for selective inclusion within image headers (Column 7, lines 35 – 48; Column 8, lines 15 – 21); and (b) transporting said software files of image header definitions to an interactive workstation computer system comprising memory-stored software applications for operating the imaging apparatus (Column 7, lines 39 – 48).

**Regarding claim 23**, Camara teaches a method for introducing informational attributes suited for selective inclusion within image headers that are selectively storable in a database together with pixel data of associated images produced by an imaging apparatus (Column 2, lines 41 – 44; line 66 – Column 3, line 4), said method comprising the steps of:

(a) utilizing software to selectively create newly defined informational attributes and selectively modify previously defined informational attributes to thereby update a memory-stored updatable table of defined informational attributes suited for selective inclusion within image headers (Column 8, lines 15 – 21);

(b) generating software files of image header definitions from said table of defined informational attributes (Column 7, lines 35 – 48; Column 8, lines 15 – 21); and

(c) transporting said software files of image header definitions to an interactive workstation computer system comprising memory-stored software applications for operating the imaging apparatus (Column 7, lines 39 – 48).

**Regarding claims 2, 22, and 24**, Camara teaches a system according to claims 1, 21, and 23, wherein said interactive workstation computer system is suited for executing said software applications to thereby deliver operation control signals to said imaging apparatus, acquire raw data of images produced by said imaging apparatus (Column 7, lines 47 – 51), process said raw data, read said software files of image header definitions, generate image headers that selectively include informational attributes as specified by said software files (Column 7, lines 1 – 12), display said image headers together with associated digital images indirectly produced by said imaging

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apparatus, and selectively store said image headers together with pixel data of said associated digital images in said database (Column 7, lines 25 – 31; Column 11, lines 36 – 40; Column 6, lines 3 – 20, see also Figure 2, where the images are received from the imaging apparatus, 200, received at the image acquisition, where the image is processed and the metadata is generated, 206; the image is then sent to the user application level for storage and display).

**Regarding claim 6**, Camara teaches a system according to claim 1, wherein said interactive computer comprises software for selectively creating newly defined informational attributes and selectively modifying previously defined informational attributes to thereby update said table of defined informational attributes (Column 8, lines 15 – 21).

**Regarding claim 8**, Camara teaches a system according to claim 1, wherein said interactive computer for generating software files of image header definitions comprises at least one software application tool (Column 7, lines 43 – 48).

**Regarding claim 9**, Camara teaches a system according to claim 1, wherein said means to transport said software files of image header definitions comprises an electrical communications network, and wherein said electrical communications network includes at least one network selected from the group consisting of a local area network, a wide area network, an Ethernet-based network, and the Internet (Column 5, lines 23 – 28).



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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camara.**

**Regarding claim 4,** Camara teaches a system according to claim 1.

Camara does not explicitly indicate wherein said interactive workstation computer system comprises software for supporting a Java virtual machine.

Examiner takes Official Notice (see MPEP § 2144.03) that "a local computer as described in Camara can contain software to support Java virtual machine since Java virtual machine is support by many types of computer systems". The Applicant is entitled to traverse any/all official notice taken in this action according to MPEP § 2144.03, namely, "if applicant traverses such an assertion, the examiner should cite a reference in support of his or her position". However, MPEP § 2144.03 further states "See also *In re Boon*, 439 F.2d 724, 169 USPQ 231 (CCPA 1971) (a challenge to the taking of judicial notice must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying the judicial notice)."

Specifically, *In re Boon*, 169 USPQ 231, 234 states "as we held in *Ahlert*, an applicant must be given the opportunity to challenge either the correctness of the fact asserted or the notoriety or repute of the reference cited in support of the assertion. We did not mean to imply by this statement that a bald challenge, with nothing more, would be all



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that was needed". Further note that 37 CFR § 1.671(c)(3) states "Judicial notice means official notice". Thus, a traversal by the Applicant that is merely "a bald challenge, with nothing more" will be given very little weight.

**Regarding claim 5**, Camara teaches a system according to claim 1.

Camara does not explicitly indicate wherein said memory-stored software applications are written in an object-oriented programming language.

Examiner takes Official Notice (see MPEP § 2144.03) that "the software described in Camara could have been written in an object-oriented programming language as one of the most common used programming language types".

**Claims 10-16, 18-20, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camara in view of Rodriguez (7154621).**

**Regarding claim 10**, Camara teaches a system, according to claim 1, further comprising an interactive computer system comprising software for creating and modifying defined informational attributes (Column 8, lines 15 – 21).

Camara does not explicitly indicate simulating application software driven operation of said imaging apparatus.

Rodriguez teaches using XML to format messages (Column 19, lines 21 – 22) and that XML supports making customized information attributes that once made are validated before being used between software applications (Column 10, lines 10 – 13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Rodriguez's teaching of formatting pictures using XML to be

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able to validate customized tags or attributes to determine if they are supported by applications.

**Regarding claim 11**, Camara teaches a system according to claim 10 wherein said interactive computer system is suited for selectively creating newly defined informational attributes, selectively modifying previously defined informational attributes (Column 8, lines 15 – 21).

Camara does not explicitly indicate and simulating application software driven operation of said imaging apparatus to thereby test newly created and modified informational attributes for desirability and compatibility with application software.

Rodriguez teaches using XML to format messages (Column 19, lines 21 – 22) and that XML supports making customized information attributes that once made are validated before being used between software applications (Column 10, lines 10 – 13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Rodriguez's teaching of formatting pictures using XML to be able to validate customized tags or attributes to determine if they are supported by applications.

**Regarding claim 13**, Camara teaches a system according to claim 10, wherein said interactive computer system comprises a processor, a display monitor, a keyboard, a pointing device, and visually oriented application development software (Figure 1).

**Regarding claim 14**, Camara teaches a system according to claim 13.

Camara does not explicitly indicate wherein said pointing device is suited for performing both point-and-click and drag-and-drop operations on the screen of said

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display monitor of said interactive computer system to thereby selectively create newly defined informational attributes and selectively modify previously defined informational attributes.

Examiner takes Official Notice (see MPEP § 2144.03) that "point-and-click and drag-and-drop are operations that can be used to perform the software processes in the system in Camara because it features a local computer with a mouse or touchpad (Column 4, lines 59 – 63) and those are the most used operations to be performed by a mouse".

**Regarding claim 25**, Camara teaches a method for introducing informational attributes suited for selective inclusion within image headers that are selectively storable in a database together with pixel data of associated images produced by an imaging apparatus (Column 2, lines 41 – 44; line 66 – Column 3, line 4), said method comprising the steps of:

(a) utilizing software for creating and modifying defined informational attributes and simulating application software driven operation of the imaging apparatus to thereby selectively create newly defined informational attributes, selectively modify previously defined informational attributes (Column 8, lines 15 – 21), and

(b) selectively including said newly created and modified informational attributes in a memory-stored updatable table of defined informational attributes suited for selective inclusion within image headers (Column 7, lines 35 – 48; Column 8, lines 15 –

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21, where different DLLs contain different algorithms to create different types of metadata for images).

Camara does not explicitly indicate and simulating application software driven operation of said imaging apparatus to thereby test newly created and modified informational attributes for desirability and compatibility with application software.

Rodriguez teaches using XML to format messages (Column 19, lines 21 – 22) and that XML supports making customized information attributes that once made are validated before being used between software applications (Column 10, lines 10 – 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Rodriguez's teaching of formatting pictures using XML to be able to validate customized tags or attributes to determine if they are supported by applications.

**Regarding claim 26**, Camara teaches a method according to claim 25, said method further comprising the steps of: (c) generating software files of image header definitions from said table of defined informational attributes (Column 7, lines 35 – 48; Column 8, lines 15 – 21); and (d) transporting said software files of image header definitions to an interactive workstation computer system comprising memory-stored software applications for operating said imaging apparatus (Column 7, lines 39 – 48).

**Regarding claim 15**, Camara teaches a system for introducing informational attributes suited for selective inclusion within image headers that are selectively storable in a database together with pixel data of associated images produced by an imaging apparatus, said system comprising:

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a database for retaining image headers and pixel data of associated images for storage and selective retrieval (Column 3, lines 52 – 56);

an imaging apparatus (Column 2, lines 44 – 49);

an interactive computer system electrically connected to said database and suited for collecting pixel data of digital images, generating image headers, and storing said image headers together with said pixel data in said database (Column 2, lines 56 – 57, the local computer system);

a network of additional server computers electrically connected to said server computer, electrically connected to said imaging apparatus, and suited for delivering operation control signals to said imaging apparatus, acquiring raw data of images produced by said imaging apparatus, processing said raw data, and delivering pixel data associated with said raw data to said server computer (Column 5, line 60 – Column 67);

an interactive computer system electrically connected to said server computer, electrically connected to said network of additional server computers, and comprising memory-stored software applications for operating said server computer, said network of additional server computers, and said imaging apparatus (Column 6, lines 48 – 62; for the additional server computer and imaging apparatus; Column 7, lines 1 – 3; for the server computer);

a memory-stored updatable table of defined informational attributes suited for selective inclusion within image headers (Column 7, lines 35 – 48; Column 8, lines 15 –

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21, where different DLLs contain different algorithms to create different types of metadata for images);

an interactive computer system comprising software for creating and modifying defined informational attributes (Column 7, lines 35 – 48; Column 8, lines 15 – 21, where different DLLs contain different algorithms to create different types of metadata for images);

an interactive computer system for generating software files of image header definitions from said table of defined informational attributes (Column 7, lines 35 – 48; Column 8, lines 15 – 21, where different DLLs contain different algorithms to create different types of metadata for images); and a means to transport said software files of image header definitions to said interactive workstation computer (Column 7, lines 39 – 48);

wherein said interactive computer system selectively creates newly defined informational attributes, selectively modifies previously defined informational attributes (Column 7, lines 35 – 48; Column 8, lines 15 – 21, where different DLLs contain different algorithms to create different types of metadata for images);

wherein said interactive computer selectively includes said newly created and modified informational attributes in said table of defined informational attributes to thereby update said table (Column 7, lines 35 – 48; Column 8, lines 15 – 21, where different DLLs contain different algorithms to create different types of metadata for images); and

wherein said interactive computer system computer executes said software applications to deliver operation control signals to said imaging apparatus, acquires raw data of images produced by said imaging apparatus (Column 6, lines 47 – 50), processes said raw data (Column 9, lines 57 – 62), read said software files of image header definitions, generates image headers that selectively include informational attributes as specified by said software files (Column 10, lines 7 – 15), displays said image headers together with associated digital images indirectly produced by said imaging apparatus, and selectively stores said image headers together with pixel data of said associated digital images in said database (Column 3, lines 52 – 56).

Camara does not explicitly indicate certain interactive workstations, systems, or computers that perform the steps defined in the claim.

Camara teaches that the system can be set up as a distributed operating environment which is communication through a network (Column 3, lines 28 – 35; Column 6, lines 23 – 38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that the claim's arrangement of nodes in the network would have been a possible setup for operation the distributed system as defined in Camara.

Camara does not explicitly indicate and simulating application software driven operation of said imaging apparatus to thereby test newly created and modified informational attributes for desirability and compatibility with application software.



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Rodriguez teaches using XML to format messages (Column 19, lines 21 – 22) and that XML supports making customized information attributes that once made are validated before being used between software applications (Column 10, lines 10 – 13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Rodriguez's teaching of formatting pictures using XML to be able to validate customized tags or attributes to determine if they are supported by applications.

**Regarding claim 16**, Camara teaches a system according to claim 15, wherein said database comprises a storage medium selected from the group consisting of a magnetic tape, a magnetic disk, a magneto-optical disk, an optical disk, a floptical disk, a floppy disk, a Zip disk, a hard disk, a disk cartridge, a tape cassette, a compact disc, and a digital versatile disc (Column 4, lines 28 – 46).

**Regarding claims 12 and 18**, Camara teaches a system according to claims 10 and 15, wherein said interactive computer and said interactive computer system are substantially integrated and coextensive with each other (Column 6, lines 21 – 30; Column 6, line 65 – Column 7, line 1).

**Regarding claim 19**, Camara teaches a system according to claim 18, wherein said network of additional server computers comprises direct memory access hardware interfaced with both said server computer and said interactive workstation computer as integrated (Column 5, lines 49 – 51).

**Regarding claim 20**, Camara teaches a system according to claim 15, wherein said network of additional server computers comprises software for supporting a real time operating system (Column 5, lines 41 – 48).

**Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Camara in view of Rodriguez, and in further view of Patel (6526304).**

**Regarding claim 17,** Camara teaches a system according to claim 15.

Camara does not explicitly indicate that said imaging apparatus is selected from the group consisting of a computerized tomography imaging apparatus, a magnetic resonance imaging apparatus, an ultrasound imaging apparatus, and an x-ray imaging apparatus.

Patel teaches a networked for retrieving and storing images from an imaging apparatus is selected from the group consisting of a computerized tomography imaging apparatus, a magnetic resonance imaging apparatus, an ultrasound imaging apparatus, and an x-ray imaging apparatus Column 1, lines 13 – 18).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Patel's teaching of retrieving and processing images from a medical device in Camara's system in order to ensure even medical images receive proper and updated metadata information.

**Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Camara in view of Wilson (6704804).**

**Regarding claim 3,** Camara teaches a system according to claim 2.

Camara does not explicitly indicate that said interactive workstation computer system comprises software for supporting InfoBus data exchanges to thereby facilitate the selective inclusion of informational attributes within generated image headers.

Wilson teaches a system that uses InfoBus data exchanges between interactive systems on the network (Column 7, lines 26 – 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Wilson's teaching of InfoBus to exchange data between the applications as defined in Camara to allow the benefits of the InfoBus standard such as easy implementation and improve the data flows.

**Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Camara in view of Land (7051019).**

**Regarding claim 7,** Camara teaches a system according to claim 1.

Camara does not explicitly indicate wherein said interactive computer comprises spreadsheet application software for both updating and maintaining said table of defined informational attributes.

Land teaches a system of providing metadata to images (Column 9, lines 29 – 37) that includes using a spreadsheet application to for the user (Column 4, line 51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Land's teaching of a spreadsheet performing the metadata generation and editing in order to allow an easy interface for editing and modifying the text of the metadata attributes of Camara.

### ***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No. 6871231 issued to Morris, because it teaches generating images together with their metadata.

U. S. Patent No. 6947954 issued to Cohen, because it teaches a networked system of adding metadata to images.

U. S. Patent No. 69954543 issued to Svendsen, because it teaches populating metadata fields.

U. S. Patent No. 7010144 issued to Davis, because it teaches a system dealing with metadata and images.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571) 272-3980. The examiner can normally be reached on 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on (571) 272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Kevin Bates'.

Kevin Bates  
November 7, 2007